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(54) Title: PROCESS FOR PRODUCING PHORENOL

(57) Abstract: The present invention relates to a process for producing (4S)-4-hydroxy-2,6,6-trimethyl-2-cyclohexene-1-one (phorenol) from 2,6,6-trimethyl-2-cyclohexene-1,4-dione (ketoisophorone) comprising contacting ketoisophorone with a microorganism which is capable of producing actinol from levodione or with a cell-free extract thereof, with a recombinant microorganism which is capable of producing actinol from levodione or with a cell-free extract thereof, or with levodione reductase, and isolating the resulting phorenol from the reaction mixture.